AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0046] with the following amended paragraph:

[0046] Here, the forgoing numerical values (mass%~~(mm/mm)~~) can be obtained by a qualitative analysis for elements having an atomic numbers equal to or greater than 6 (carbon) using a fundamental parameter (FP) method. The "FP method" is a method of obtaining theoretical X-ray intensity from a theoretical formula of fluorescent X-ray intensity by use of physical constants such as a mass absorption coefficient or spectral distribution of an X-ray source, and calculating contents by performing comparison and convergence in terms of measured X-ray intensity.

Please replace paragraph [0090] with the following amended paragraph:

[0090] The forgoing numerical values (mass%~~(mm/mm)~~) can be obtained by a qualitative analysis for elements having an atomic numbers equal to or greater than 6 (carbon) using the fundamental parameter (FP) method. Fig. 16 exemplifies typical numerical values of the nonmetal coating material according to the second embodiment. In Fig. 16, calculation is made on the assumption that a content of hydrogen is 0 mass%, and analytical values for carbon and oxygen are not indicated.

Please replace paragraph [0118] with the following amended paragraph:

[0118] Fig. 18 exemplifies typical numerical values (mass%~~(mm/mm)~~) of the binder according to the third embodiment. In Fig. 18, calculation is made on the assumption that a content of hydrogen is 0 mass%, and analytical values for carbon and oxygen are not indicated. From the numerical values exemplified in Fig. 16, it is preferable that, in relation to Si, the binder according to the third embodiment includes Na in a range of from 4% to 8%, Mg in a range of from 0.1% to 0.5%, Cl in a range of from 0.3% to 0.6%, and K in a range of from 0.1% to 0.5%.

Please replace paragraph [0155] with the following amended paragraph:

[0155] Fig. 22 shows typical numerical values (mass%~~(mm/mm)~~) of the heat-insulating material according to the fourth embodiment. Here, the forgoing numerical values can be obtained by a qualitative analysis for elements having atomic numbers equal to or greater than 6 (carbon) using a fundamental parameter (FP) method. In Fig. 22, calculation is made on the assumption that a content of hydrogen is 0 mass%, and analytical values for carbon and oxygen are not indicated.

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A coating material ~~comprising~~ obtained by

agitating a mixture of a nonmetal coating material made of a thickening agent, titanium oxide, kaolin, a plastic raw material, and aluminum oxide powder in a mixing tank, wherein the thickening agent includes a binder;

adding and agitating an adhesive including water, caustic soda, high-protein powder, polyvinyl acetate, and glycerin in the mixing tank;

adding and agitating ceramic powder in the mixing tank; and

grinding the mixture powder,

wherein as a result of a fluorescent X-ray analysis in an incinerated state after drying the coating material at 105°C for 5 hours and heating at an ignition temperature of 700°C, the coating material comprises the following elements in percentage by weight:

sodium in a range of from 0.1% to 10%;

magnesium in a range of from 0.01% to 1%;

aluminum in a range of from 0.1% to 15%;

potassium in a range of from 1% to 30%;

silicon in a range of from 10% to 30%; and

iron in a range of from 0.1% to 1%.

2. (Currently amended) The coating material of claim 1, further comprising the following elements in percentage by weight:

strontium in a range of from 0.001% to 0.05%; and

zirconium in a range of from 0.001% to 0.05%.

3. (Currently amended) The coating material of claim 1, further comprising the following elements in percentage by weight:

phosphorus in a range of from 0.01% to 5.0%;

chlorine in a range of from 0.01% to 1.0%;

calcium in a range of from 0.1% to 10%;

titanium in a range of from 0.1% to 10%;

zinc in a range of from 0.1% to 10%; and

molybdenum in a range of from 0.1% to 5%.

4. (Currently amended) The coating material of claim 1, further comprising the following elements in percentage by weight:

phosphorus in a range of from 0.01% to 0.5%;

sulfur in a range of from 0.01% to 1.0%; and

titanium in a range of from 0.1% to 10%.

5. (Currently amended) The coating material of claim 1, further comprising the following elements in percentage by weight:

calcium in a range of from 0.01% to 5%;

chlorine in a range of from 0.01% to 1%; and

titanium in a range of from 0.01% to 5%.

6. (Currently amended) The coating material of claim 1, wherein the sodium is in a range of from 0.5% to 5%, the magnesium is in a range of from 0.01% to 0.5%, the aluminum is in a range of from 1% to 15%, the potassium is in a range of 1% to 15%, silicon is in a range of 15% to 30%, and the iron is in a range of 0.15% to 0.8%, in percentage by weight ~~as a result of a fluorescent X-ray analysis in an incinerated state after drying~~.

7. (Currently amended) The coating material of claim 1, wherein the sodium is in a range of from 0.7% to 1.5%, the magnesium is in a range of from 0.015% to 0.040%, the aluminum is in a range of from 2.5% to 6.5%, the potassium is in a range of 1% to 5%, silicon is in a range of 15% to 20%, and the iron is in a range of 0.05% to 0.30%, in percentage by weight ~~as a result of a fluorescent X-ray analysis in an incinerated state after drying~~.

8. (Currently amended) The coating material of claim 1, wherein the sodium is in a range of from 1.0% to 3.0%, the magnesium is in a range of from 0.05% to 0.2%, the aluminum is in a range of from 0.8% to 4.0%, the potassium is in a range of 8.0% to 15%, silicon is in a range of 25% to 30%, and the iron is in a range of 0.3% to 0.9%, in percentage by weight ~~as a result of a fluorescent X-ray analysis in an incinerated state after drying~~.

9. (Currently amended) The coating material of claim 1, wherein the sodium is in a range of from 1.0% to 3.0%, the magnesium is in a range of from 0.02% to 0.07%, the aluminum is in a range of from 1.0% to 6.0%, the potassium is in a range of 5.0% to 10%, silicon is in a range of 20% to 25%, and the iron is in a range of 0.7% to 1.0%, in percentage by weight ~~as a result of a fluorescent X-ray analysis in an incinerated state after drying~~.

10. (Currently amended) The coating material of claim 1 comprising the following elements in percentage by weight:

sodium in a range of from 4% to 8% in relation to silicon;

magnesium in a range of from 0.1% to 0.5% in relation to silicon;

chlorine in a range of from 0.3% to 0.6% in relation to silicon; and

potassium in a range of from 0.1% to 0.5% in relation to silicon.

11. (Currently amended) The coating material of claim 1 comprising the following elements in percentage by weight:

sodium in a range of from 4.5% to 6% in relation to silicon;

magnesium in a range of from 0.1% to 0.3% in relation to silicon;

chlorine in a range of from 0.4% to 0.6% in relation to silicon; and

potassium in a range of from 0.1% to 0.3% in relation to silicon.

12. (Withdrawn) A method of manufacturing a coating material comprising:

agitating a mixture of a nonmetal coating material and aluminum oxide powder in a mixing tank;

adding and agitating an adhesive including water, caustic soda, high-protein powder, polyvinyl acetate, and glycerin in the mixing tank;

adding and agitating ceramic powder in the mixing tank; and

grinding the mixture powder.

13. (Withdrawn) The method of claim 12, wherein the mixture powder is ground into particles having grain size in a range of from 0.15 to 200μm.

14. (Withdrawn) The method of claim 12, wherein the nonmetal coating material is made of a thickening agent including a binder and the adhesive, titanium oxide, kaolin, and a plastic raw material.

15. (Withdrawn) The method of claim 14, wherein the binder is made of sodium silicate, potassium silicate, silicon dioxide, amorphous silica, bentonite, and the plastic raw material.

AMENDMENTS TO THE DRAWINGS:

The attached sheets of drawings include changes to Figs. 3, 16 and 18. These sheets, which include Figs. 3, 16 and 18, replace the original sheets including Figs. 3, 16 and 18. In Figs. 3, 16 and 18, the typographical error of the unit of mass/mass percent "%(mm/mm)" has been corrected to "%(m/m)".

Attachment: Replacement Sheets
Annotated Sheets Showing Changes